

Service Definition File

Creating Service Definition file while disconnected from the server

When disconnected from the server you will configure your service definition with no available connection to ArcGIS Server.

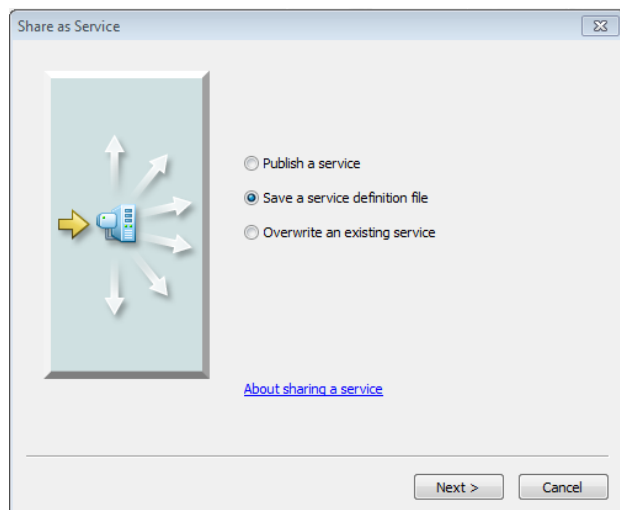
- Make sure the option to **include data in service definition when publishing** is unchecked when creating the file. Keep in mind that the data needs to be in a location that is visible to ArcGIS Server. When you publish, the service will continue to reference the original data included in your GIS resource. A separate copy is not maintained on the server. Using this method creates a snapshot of your GIS resource at the time the service definition file is published.

Create a Service Definition in ArcGIS for Desktop

Using ArcGIS for Desktop, you can quickly create a service definition that can be uploaded and published to your ArcGIS Server site.

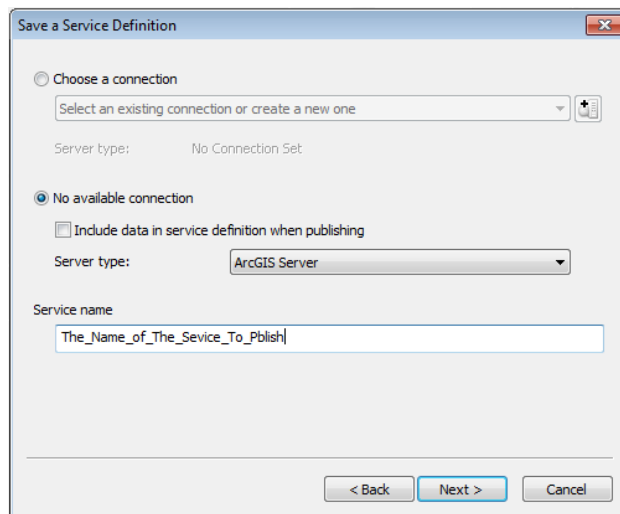
1. In the **Share as Service** window, choose **Save a service definition file**.

Click **Next**.

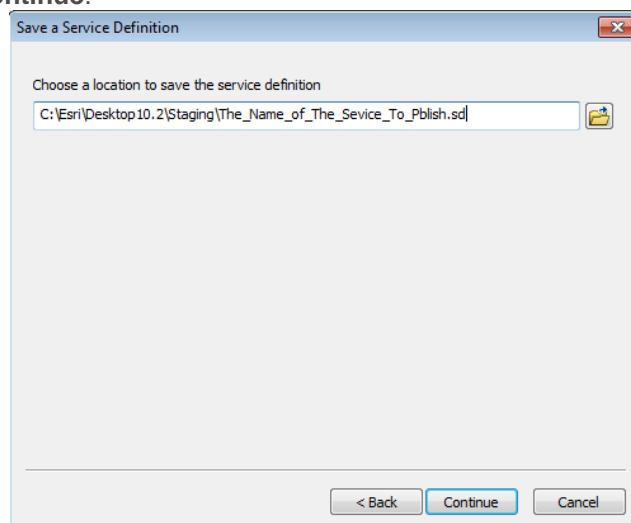


2. In the **Save a Service Definition** window:

- Select **No available connection**.
- Do not check **Include data in service definition when publishing**.
- In the **Server Type** drop-down list, choose **ArcGIS Server**.
- Enter a new name for the service. The name cannot be more than 120 characters long and may contain only alphanumeric characters and underscores.
- Click **Next**.



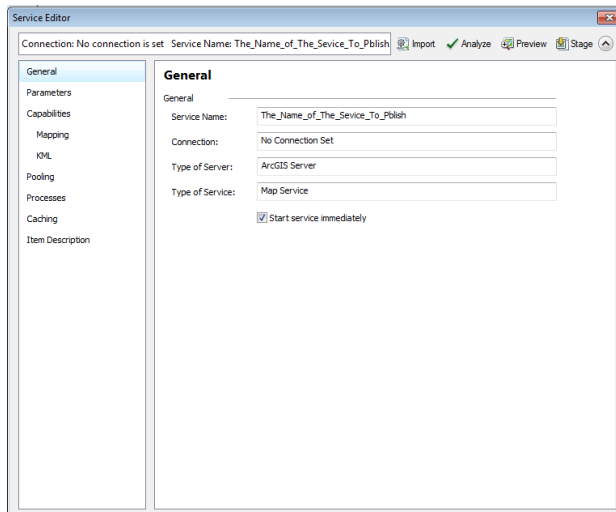
3. Choose the location to save the service definition file. You can accept the default or specify a location of your own. Click **Continue**.



4. In the Service Editor, set the properties you want for your service definition. Here you can choose what users can do with your service definition and take control of how the server will expose your service definition.

5. Service Editor Settings:

5.1. General:



Service Editor

Connection: No connection is set Service Name: The_Name_of_The_Service_To_Publish

General

Service Name: The_Name_of_The_Service_To_Publish

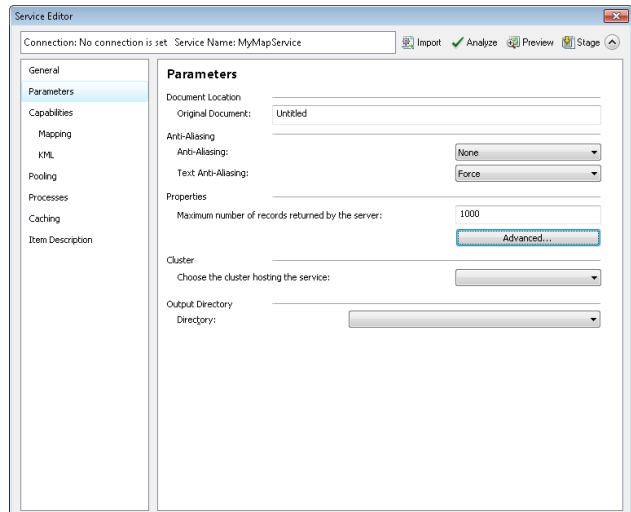
Connection: No Connection Set

Type of Server: ArcGIS Server

Type of Service: Map Service

☒ Start service immediately

5.2. Parameters:



Service Editor

Connection: No connection is set Service Name: MyMapService

Parameters

Document Location

Original Document: Untitled

Anti-aliasing

Anti-aliasing: None

Text Anti-aliasing: Force

Properties

Maximum number of records returned by the server: 1000

Advanced...

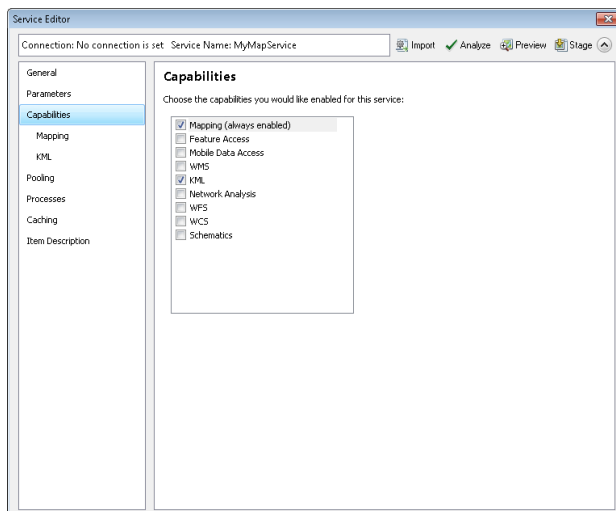
Cluster

Choose the cluster hosting the service:

Output Directory

Directory:

5.3. Capabilities:



Service Editor

Connection: No connection is set Service Name: MyMapService

Capabilities

Choose the capabilities you would like enabled for this service:

☒ Mapping (always enabled)

☐ Feature Access

☐ Mobile Data Access

☐ WMS

☒ KML

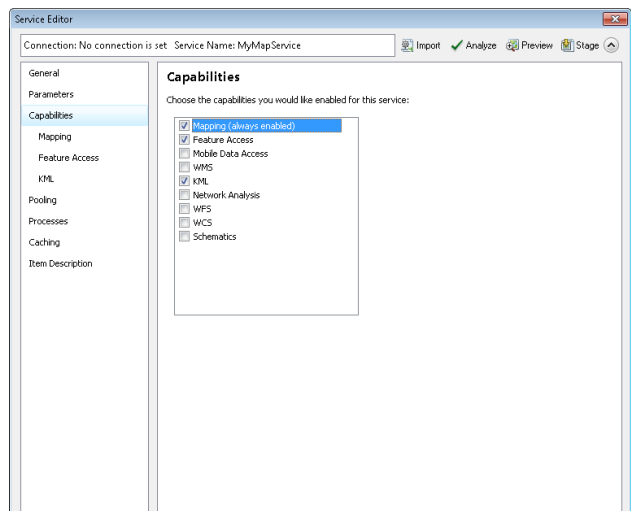
☐ Network Analysis

☐ WFS

☐ WCS

☐ Schematics

5.4. Capabilities – Feature Access:



Service Editor

Connection: No connection is set Service Name: MyMapService

Capabilities

Choose the capabilities you would like enabled for this service:

☒ Mapping (always enabled)

☒ Feature Access

☐ Mobile Data Access

☐ WMS

☒ KML

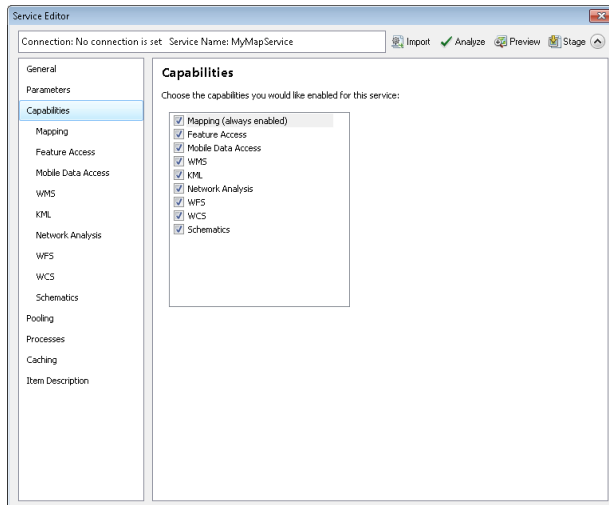
☐ Network Analysis

☐ WFS

☐ WCS

☐ Schematics

5.5. Capabilities – Mobile Data Access:



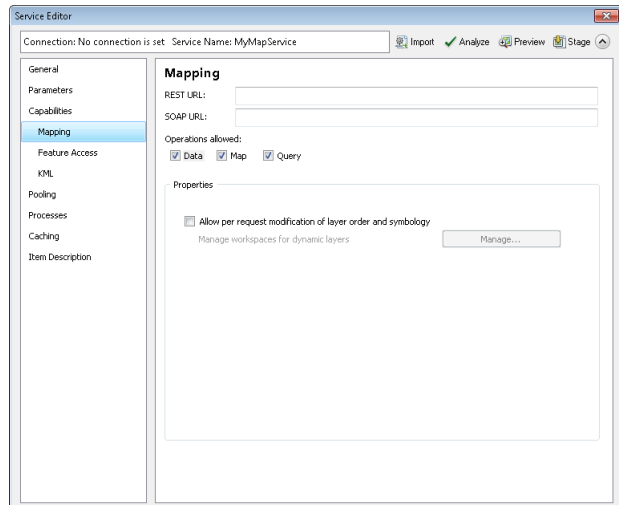
Service Editor
Connection: No connection is set Service Name: MyMapService

General
Parameters
Capabilities
Mapping
Feature Access
Mobile Data Access
WMS
KML
Network Analysis
WFS
WCS
Schematics
Pooling
Processes
Caching
Item Description

Capabilities
Choose the capabilities you would like enabled for this service:

- ☒ Mapping (always enabled)
- ☒ Feature Access
- ☒ Mobile Data Access
- ☒ WMS
- ☒ KML
- ☒ Network Analysis
- ☒ WFS
- ☒ WCS
- ☒ Schematics

5.6. Mapping:



Service Editor
Connection: No connection is set Service Name: MyMapService

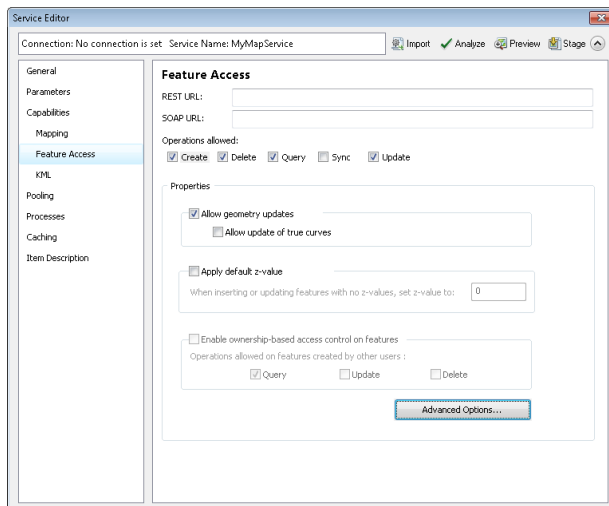
General
Parameters
Capabilities
Mapping
Feature Access
KML
Pooling
Processes
Caching
Item Description

Mapping
REST URL:
SOAP URL:

Operations allowed:
☒ Data ☒ Map ☒ Query

Properties
☐ Allow per request modification of layer order and symbology
Manage workspaces for dynamic layers Manage...

5.7. Feature Access:



Service Editor
Connection: No connection is set Service Name: MyMapService

General
Parameters
Capabilities
Mapping
Feature Access
KML
Pooling
Processes
Caching
Item Description

Feature Access
REST URL:
SOAP URL:

Operations allowed:
☒ Create ☒ Delete ☒ Query ☐ Sync ☒ Update

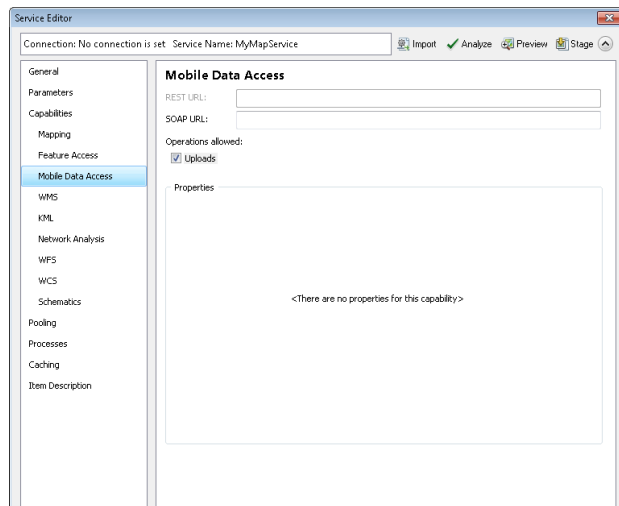
Properties
☒ Allow geometry updates
☐ Allow update of true curves

☐ Apply default z-value
When inserting or updating features with no z-values, set z-value to: 0

☐ Enable ownership-based access control on features
Operations allowed on features created by other users:
☒ Query ☐ Update ☐ Delete

Advanced Options...

5.8. Mobile Data Access:



Service Editor
Connection: No connection is set Service Name: MyMapService

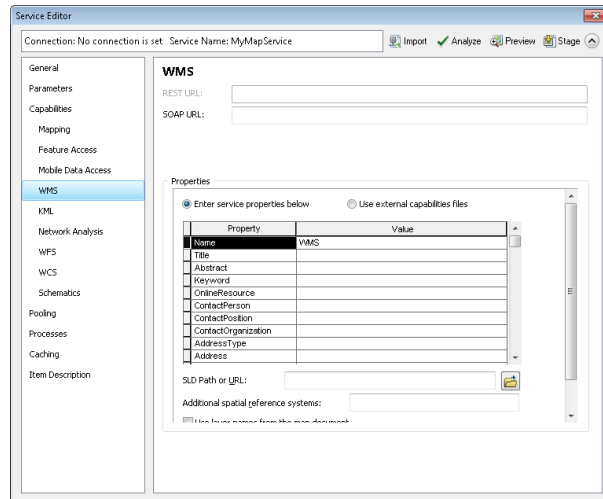
General
Parameters
Capabilities
Mapping
Feature Access
Mobile Data Access
WMS
KML
Network Analysis
WFS
WCS
Schematics
Pooling
Processes
Caching
Item Description

Mobile Data Access
REST URL:
SOAP URL:

Operations allowed:
☒ Uploads

Properties
<There are no properties for this capability>

5.9 Mobile Data Access – WMS:



Service Editor
Connection: No connection is set Service Name: MyMapService

General
Parameters
Capabilities
Mapping
Feature Access
Mobile Data Access
WMS
KML
Network Analysis
WFS
WCS
Schematics
Pooling
Processes
Caching
Item Description

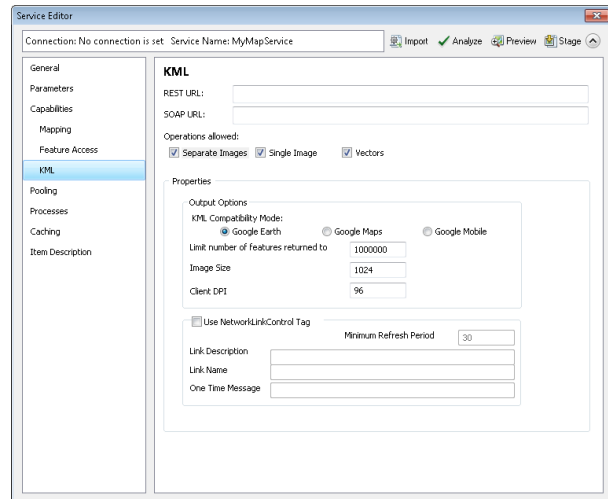
REST URL:
SOAP URL:

Properties
Enter service properties below Use external capabilities files

Property	Value
Name	WMS
Title	
Abstract	
Keyword	
OnlineResource	
ContactPerson	
ContactPosition	
ContactOrganization	
AddressType	
Address	

SLD Path or URL:
Additional spatial reference systems:

5.10. Mobile Data Access - KML:



Service Editor
Connection: No connection is set Service Name: MyMapService

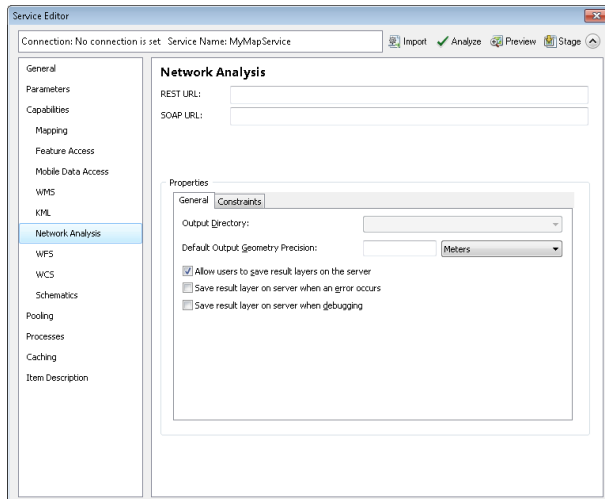
General
Parameters
Capabilities
Mapping
Feature Access
KML
Pooling
Processes
Caching
Item Description

REST URL:
SOAP URL:

Operations allowed:
☒ Separate Images ☒ Single Image ☒ Vectors

Properties
Output Options
KML Compatibility Mode:
☒ Google Earth ☐ Google Maps ☐ Google Mobile
Limit number of features returned to: 1000000
Image Size: 1024
Client DPI: 96
☐ Use NetworkLinkControl Tag Minimum Refresh Period: 30
Link Description:
Link Name:
One Time Message:

5.11. Mobile Data Access – Network Analysis:



Service Editor
Connection: No connection is set Service Name: MyMapService

General
Parameters
Capabilities
Mapping
Feature Access
Mobile Data Access
WMS
KML
Network Analysis
WFS
WCS
Schematics
Pooling
Processes
Caching
Item Description

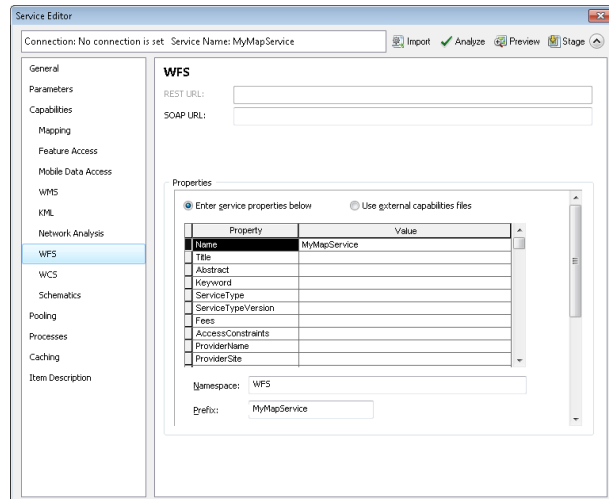
REST URL:
SOAP URL:

Properties
General Constraints

Output Directory:
Default Output Geometry Precision: Meters

☒ Allow users to save result layers on the server
☐ Save result layer on server when an error occurs
☐ Save result layer on server when debugging

5.12. Mobile Data Access - WFS:



Service Editor
Connection: No connection is set Service Name: MyMapService

General
Parameters
Capabilities
Mapping
Feature Access
Mobile Data Access
WMS
KML
Network Analysis
WFS
WCS
Schematics
Pooling
Processes
Caching
Item Description

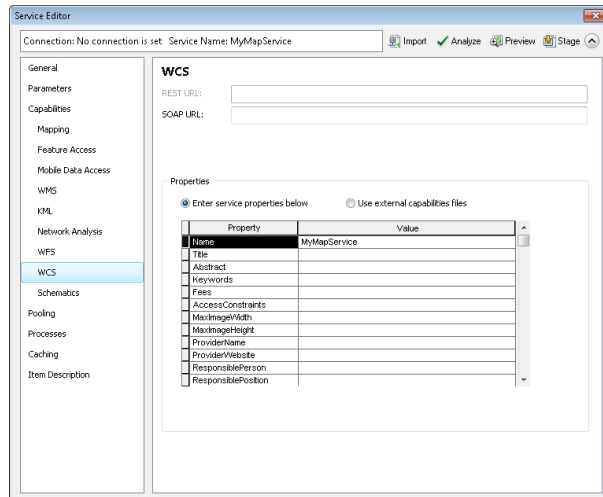
REST URL:
SOAP URL:

Properties
Enter service properties below Use external capabilities files

Property	Value
Name	MyMapService
Title	
Abstract	
Keyword	
ServiceType	
ServiceTypeVersion	
Fees	
AccessConstraints	
ProviderName	
ProviderSite	

Namespace: WFS
Prefix: MyMapService

5.13. Mobile Data Access – WCS:



Service Editor
Connection: No connection is set Service Name: MyMapService

General
Parameters
Capabilities
Mapping
Feature Access
Mobile Data Access
WMS
KML
Network Analysis
WFS
WCS
Schematics
Pooling
Processes
Caching
Item Description

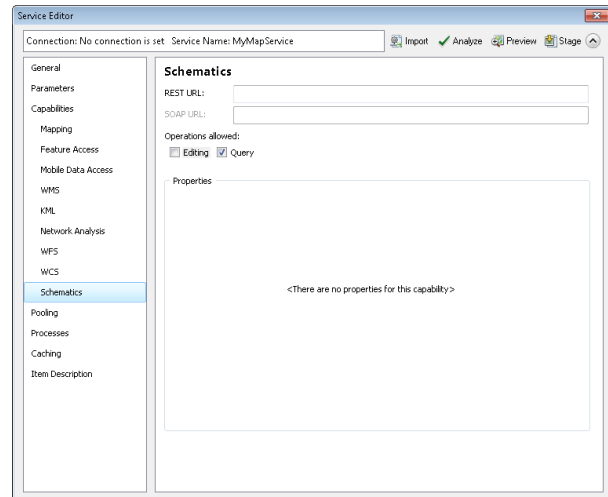
WCS

REST URL:
SOAP URL:

Properties
☒ Enter service properties below ☐ Use external capabilities files

Property	Value
Name	MyMapService
Title	
Abstract	
Keywords	
Fees	
Access/Constraints	
MaxImageWidth	
MaxImageHeight	
ProviderName	
ProviderWebsite	
ResponsiblePerson	
ResponsiblePosition	

5.14. Mobile Data Access - Schematics:



Service Editor
Connection: No connection is set Service Name: MyMapService

General
Parameters
Capabilities
Mapping
Feature Access
Mobile Data Access
WMS
KML
Network Analysis
WFS
Schematics
Pooling
Processes
Caching
Item Description

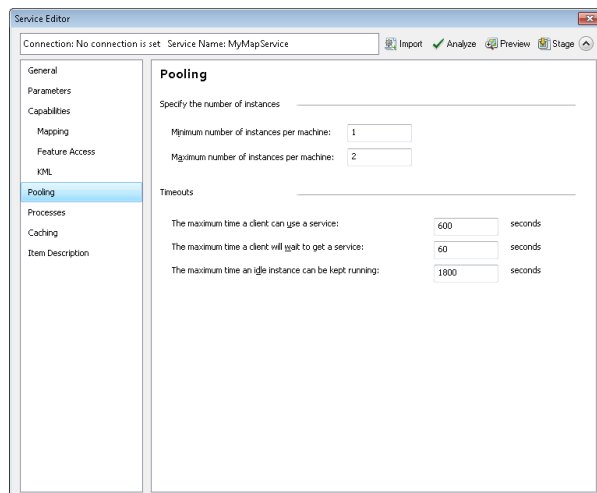
Schematics

REST URL:
SOAP URL:

Operations allowed:
☐ Editing ☒ Query

Properties
<There are no properties for this capability>

5.15. Pooling:



Service Editor
Connection: No connection is set Service Name: MyMapService

General
Parameters
Capabilities
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Feature Access
KML
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Caching
Item Description

Pooling

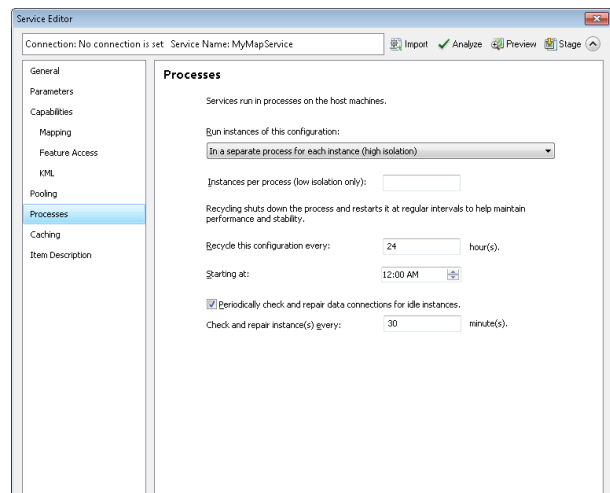
Specify the number of instances

Minimum number of instances per machine:
Maximum number of instances per machine:

Timeouts

The maximum time a client can use a service: seconds
The maximum time a client will wait to get a service: seconds
The maximum time an idle instance can be kept running: seconds

5.16. Processes:



Service Editor
Connection: No connection is set Service Name: MyMapService

General
Parameters
Capabilities
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Processes
Caching
Item Description

Processes

Services run in processes on the host machines.

Run instances of this configuration:

Instances per process (low isolation only):

Recycling shuts down the process and restarts it at regular intervals to help maintain performance and stability.

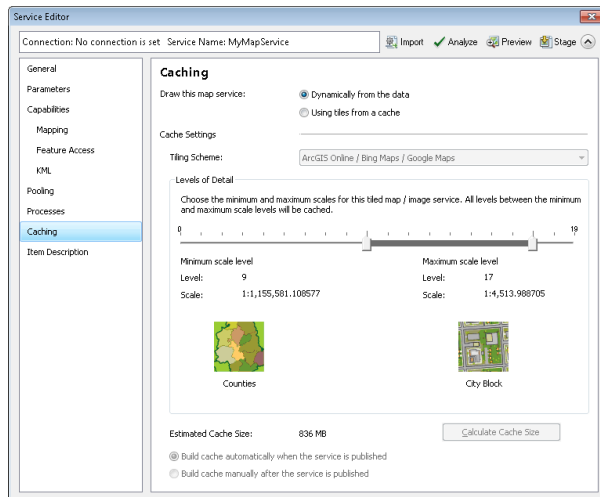
Recycle this configuration every: hour(s).

Starting at:

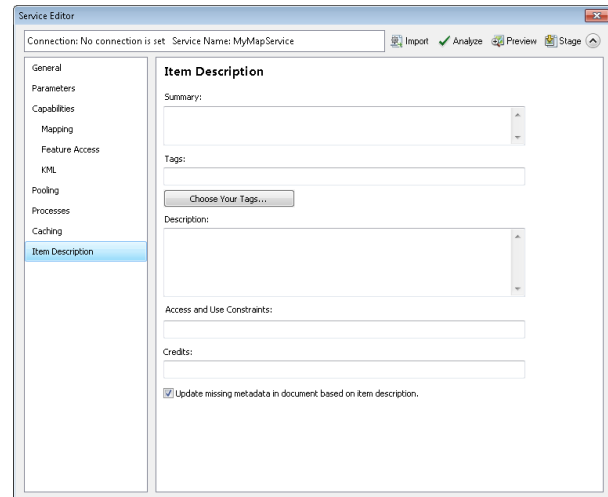
☒ Periodically check and repair data connections for idle instances.

Check and repair instance(s) every: minute(s).

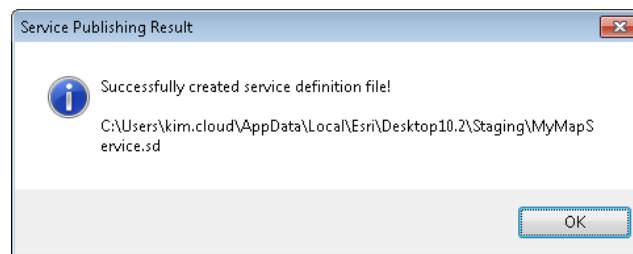
5.17 Caching:






5.18. Item Description:



5.19. Service Publishing Results:



6. Click **Analyze** . This examines your GIS resource to see if it can be saved as a service definition.
7. Fix any errors  in the **Prepare** window; this must be done before you can stage your service definition locally on disk. Optionally, you can fix the warnings and informational messages to further improve the performance and appearance of the service derived from your service definition file. For more information about resolving these issues, see [Analyzing your GIS resource](#).

 **Tip:** If you close the **Service Editor** during this session, you'll be prompted to save your work as a draft service. Draft services allow you to come back to your service definition configuration work at a later time. By default, service definition files being configured for a specific ArcGIS Server connection are saved in the **Drafts** folder of the connection. Conversely, service definitions being configured with no available connection to the server are saved in the staging folder on disk. For more information, see [About draft services](#).

8. Your service definition is saved to the location you specified and can be sent to DTI to be published.